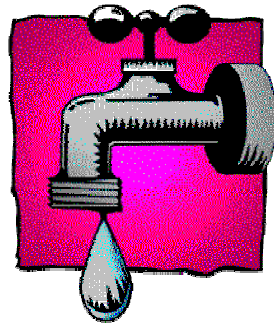


Locating & Correcting Water Leaks in Your Home



Prepared By:
Frederick County
Division of
Utilities & Solid Waste Management

Leaking plumbing fixtures within homes can cause high water bills, excessive loss of water, and increased flow to the sewer system.

Toilets

Many leaks occur in toilets and may not be immediately recognized since there is no visible sign of a leak. Leaks in toilets can occur at the overflow pipe or at the plunger ball or flap valve on the bottom of the toilet tank. To check toilets for leakage, take the tank lid off and flush. The water level should come up to about a half inch or so below the overflow pipe. If necessary, adjust the float to insure proper tank water level.

Toilets can have silent leaks caused by an improperly seating plunger ball or flap valve. These leaks are more difficult to detect since there is usually no visible sign of water flowing down the drain. If the toilet plunger ball or flap valve does not seat properly water slowly flows from the toilet tank into the bowl and into the drain. This type of leak can be detected by placing a small amount of food coloring into the toilet tank (Do Not Flush The Toilet). Wait for about 10 minutes without flushing the toilet, check to see if the food coloring appears in the toilet bowl. If it does then the toilet has a silent leak. If you have already checked the toilet tank overflow pipe, the leak is being caused by an improperly seating plunger or flap valve.

These leaks can usually be fixed with parts from your local hardware store or you may want to have a professional plumber make the repair.

Faucets

Water leaks can also occur at sink and bath faucets as well as outside sill cocks. In most cases these leaks are caused by worn washers or "O" rings. Even a slow drip from a faucet can have a big impact on your quarterly water consumption. A two drop per minute drip from a single faucet can translate into more than 1,000 gallons of wasted water during a quarterly water billing cycle. Larger faucet leaks with a continuous stream about the size of a pencil point can increase water consumption by more than 10,000 gallons in a quarterly billing period.

To repair a leaking faucet turn off the water supply line to the faucet, disassemble the leaking fixture valve, replace the washer and reassemble the valve. Turn the water supply back on and check for leaks. Any good do-it-yourself book will offer advice on how to replace a faulty washer. If you do not feel comfortable attempting this type of repair, have the work done by a competent individual.






Outside Taps (Sill Cocks)

Most homes have at least two sill cocks for outside water use convenience. These sill cocks or hose bibs can also leak and cause excessive water loss. Another leakage problem associated with outside sill cocks may occur when they are left on and garden hoses are attached, relying only on the spray nozzle to stop the water flow. Most hoses are not designed for continuous pressure and the valve mechanism in the spray nozzle is not as reliable as the valve assembly in the sill cock. Occasionally leaks develop in the hose or a sudden catastrophic rupture can occur causing thousands of gallons of water loss before being detected by the occupant of the home. Also, leaving sill cocks on during freezing weather can also cause pipes or hoses to rupture and create severe leaks.

To prevent unauthorized water use from sill cocks, locate the water supply shut off valve for each sill cock inside the home and make sure this valve is closed after using the sill cock. Sometimes children may inadvertently turn sill cocks on and forget to turn them off.

Service Line Water Leaks

Water leaks can also develop in the home's water service line. Although such leaks can be difficult to detect, there are some telltale signs which may indicate that you have a leak in your service line. You should be continuously observant for:

-  Wet spots in your yard between the meter vault and your house.
-  The sound of running water or a hissing sound which persists even when water is not being used in the home.
-  Water leaking into your basement or crawl space near the location of your water service line.
-  A noticeable loss in the home's normal water pressure or flow
-  Water bills showing progressively higher water consumption that cannot be explained otherwise.

If you think you may have a leak in your service line, find and turn off the main shut off valve within your home. Place your ear on the main water line coming into your home. If you have a hissing noise you probably have a leak. You should then contact our office so we can determine if the leak is in your water service or if the leak is in the meter vault located near the property line of the home. Water leaks on the house side of the meter vault are the responsibility of the homeowner, while leaks within the meter vault and on the mainline side of the meter are Frederick County's responsibility. Please feel free to call our office if you think you may have an outside water leak. We will be more than happy to assist you in determining if your service line is leaking. There is a minimal charge for this assistance. However, it can identify unintentional water loss that can lead to increased water charges billed to your account.

Even a small hole in your water service line can result in excessive leakage and may contribute to higher than normal water bills. Table 1 below illustrates the magnitude of leakage through various size holes in a water service line at a line pressure of 60 pounds per square inch. If you need further assistance detecting leaks in your service line, please call our Office of Accounting & Finance Support at 301-600-2354.

Table 1		
Water Loss in Gallons		
Size of Hole (inch)	Loss per Day @ 60 PSIG	Loss per Month @ 60 PSIG
1/64	49	1,470
1/32	198	5,940
1/16	792	23,760
1/8	3,169	95,070
1/4	12,676	380,280

For Residential Customers: Allow a one time per House adjustment

Residential customers experiencing an underground service line leak shall be allowed to request a one-time adjustment following the service line leak repair. This adjustment does not apply to interior plumbing leaks. This adjustment shall only be allowed for the billing cycle in which the leak occurred. The customer must submit a written request to the Division of Utilities & Solid Waste Management, which includes an explanation of the cause of the problem, the type of service line that failed, the method of repair and supporting documents such as plumbing contractor receipts that verify where the leak occurred, how it was repaired and the cause of the service line failure. This will be a one-time per house (per owner) adjustment. The owner must be aware that use of the adjustment for one occurrence precludes the use of this adjustment for a second or subsequent leak at that residence. If the customer purchases another home served by Frederick County, the customer would be eligible for the one-time adjustment for the new property.

Following verification by the Division of the underground leak, the customer's bill for the quarter in which the leak was initially identified will be based upon the customer's average consumption. Charges for water above the "average" will be abated from the first period's bill.

In addition, the County shall provide a water billing adjustment for the period immediately following the "averaged" period. Such billings shall be based on the full quantity of the metered water; however, the water used shall be billed using the lowest residential block of the rate structure.